

Listing of the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A vascular insertion assembly, comprising:
 - an insertion sheath;
 - a dilator sized to fit inside the insertion sheath;
 - ~~the insertion sheath having an inside diameter and comprising a sheath distal end and a sheath proximate end;~~
 - ~~the dilator sized to fit in the inside diameter of the insertion sheath comprising a dilator distal end and a dilator proximate end;~~
 - a first ~~inlet port~~ distal hole located ~~about the sheath~~ at a distal end of the vascular insertion assembly;
 - a first indicator located at a proximal end of the vascular insertion assembly, the first indicator being in fluid communication with the first distal hole;
 - a second distal hole located at the distal end of the vascular insertion assembly; and
 - ~~the first~~ a second indicator ~~coupled with the first inlet port, such that when the first inlet port penetrates a vessel the first indicator provides indication of excessive penetration of the insertion sheath to the vessel~~ located at the proximal end of the vascular insertion assembly, the second indicator being in fluid communication with the second distal hole.
- 2-3. (Cancelled)
4. (Withdrawn – Currently Amended) The assembly according to ~~claim 3~~, claim 1, wherein the ~~plurality of inlet ports~~ first distal hole and the second distal hole are offset from each other to accommodate an insertion angle of the assembly.
5. (Withdrawn – Currently Amended) The assembly according to ~~claim 2~~, claim 1 further comprising:
 - ~~at least a third inlet port;~~ distal hole located at the distal end of the vascular insertion assembly; and

~~at least a third indicator; and~~ indicator located at the proximal end of the vascular insertion assembly, the third indicator being in fluid communication with the third distal hole.

~~at least the third indicator coupled with at least the third inlet port, such that when at least the third inlet port penetrates the vessel at least the third indicator provides indication.~~

6. (Cancelled)

7. (Withdrawn – Currently Amended) The assembly according to ~~claim 2,~~ claim 1 wherein the first ~~inlet port~~ distal hole and the first indicator provide indication of ~~too far penetration of the insertion sheath to~~ proper insertion of the vascular insertion assembly into a vessel and the second distal hole and the second indicator provide indication of over insertion of the vascular insertion assembly into the vessel.

8-11. (Cancelled)

12. (Withdrawn – Currently Amended) The assembly according to claim 5, wherein:
~~the second inlet port~~ the third distal hole and the ~~second~~ third indicator provide indication of an initial ~~penetration~~ insertion of the insertion sheath ~~to the~~ into a vessel;

~~the first inlet port~~ distal hole and the first indicator provide indication of proper ~~penetration~~ insertion of the insertion sheath ~~to~~ into the vessel; and

~~at least the third inlet port~~ the second distal hole and ~~at least the third~~ second indicator provide indication of ~~too far penetration~~ over insertion of the insertion sheath ~~to~~ into the vessel.

13. (Currently Amended) The assembly according to claim 1, wherein ~~the first indicator is a first drip hole in fluid communication with the first inlet port~~ at least one of the first indicator or the second indicator is a drip hole.

14. (Currently Amended) The assembly according to ~~claim 13,~~ claim 1, further comprising:
a first lumen ~~providing that provides~~ the fluid communication between the first drip distal hole and the first inlet port indicator;

wherein the first lumen passes through the dilator.

15. (Currently Amended) The assembly according to ~~claim 13, wherein the first lumen is located in~~ claim 14, further comprising
a second lumen that provides the fluid communication between the second distal hole and the second indicator;
wherein the second lumen passes through the dilator.
16. (Currently Amended) The assembly according to ~~claim 13, wherein the first lumen is located in a wall of~~ claim 14, further comprising
a second lumen that provides the fluid communication between the second distal hole and the second indicator;
wherein the second lumen passes through the insertion sheath.
17. (Currently Amended) The assembly according to ~~claim 2,~~ claim 1, wherein the first indicator is a first drip hole in fluid communication with the first inlet port and the second indicator is a second drip hole in fluid communication with the second inlet port distal hole is in a distal end of the dilator.
18. (Cancelled)
19. (Currently Amended) The assembly according to ~~claim 18,~~ claim 1, wherein ~~at least one of the first lumen and the second lumen is located in the dilator~~ the second distal hole is in a distal end of the insertion sheath.
20. (Currently Amended) The assembly according to claim 18, wherein ~~at least one of the first lumen and the second lumen is located in the dilator~~ the first distal hole and the second distal hole are spaced apart from each other in a lengthwise direction of the vascular insertion assembly.
21. (Currently Amended) The assembly according to ~~claim 17,~~ claim 1, further comprising:
~~a lumen;~~
~~the lumen comprises~~ a lumen having a first flow path and a second flow ~~path,~~ path;

wherein the first flow path provides the fluid communication between the first ~~drip~~ distal hole and the first ~~inlet port~~ indicator; and

a ~~second~~ the second flow path provides the fluid communication between the second ~~drip~~ distal hole and the second ~~inlet port~~ indicator.

22. (Withdrawn – Currently Amended) The assembly according to claim 1, wherein at least one of the first indicator or the second indicator is a pressure gauge.

23. (Cancelled)

24. (Withdrawn – Currently Amended) The assembly according to ~~claim 22~~, claim 1 further comprising:

a ~~second inlet port located about the dilator distal end; wherein the gauge is a differential pressure gauge and~~ gauge;

wherein the first inlet port is coupled to distal hole is in fluid communication with a first input port hole of the differential pressure gauge and the second inlet port is coupled to distal hole is in fluid communication with a second input port hole of the differential pressure gauge, such that the differential pressure gauge indicates when the second inlet port and the first inlet port penetrate vascular insertion assembly penetrates the vessel.

25. (Withdrawn) The assembly according to claim 24, wherein the differential pressure gauge is a ball, float gauge.

26-27. (Cancelled)

28. (Currently Amended) A vascular insertion assembly, comprising:

an insertion sheath having a ~~sheath~~ distal end and a ~~sheath~~ proximate end;

a dilator having a ~~dilator~~ distal end and a ~~dilator proximate end; end~~, the dilator being sized to fit in the insertion sheath;

a first ~~inlet port~~ distal hole located ~~about the dilator~~ at a distal end of the vascular insertion assembly;

a second ~~inlet port~~ distal hole located ~~about the sheath at the~~ at the distal end of the vascular insertion assembly, the second distal hole and the first distal hole are spaced apart from each other in a lengthwise direction of the vascular insertion assembly;

a first ~~drip hole~~ proximal hole located at a proximal end of the vascular insertion assembly, the first proximal hole being in fluid communication with the first inlet port distal hole; and

a second ~~drip hole~~ proximal hole located at the proximal end of the vascular insertion assembly, the second proximal hole being in fluid communication with the second inlet port, distal hole;

wherein the vascular insertion assembly is configured so that fluid flows out of the first drip proximal hole when the first inlet port penetrates distal hole enters a vessel and fluid flows out of the second drip proximal hole when the second inlet port penetrates distal hole enters the vessel.

29. (Currently Amended) The assembly according to claim 28, wherein ~~fluid communication is provided via at least one lumen~~ at least one of the first distal hole or the second distal hole is in the distal end of the dilator.

30. (Currently Amended) The assembly according to claim 28, wherein ~~the first inlet port comprises a plurality of first inlet ports~~ at least one of the first distal hole or the second distal hole is in the distal end of the insertion sheath.

31. (Withdrawn – Currently Amended) The assembly according to ~~claim 30, wherein the plurality of first inlet ports are staggered~~ claim 28, wherein the first distal hole is in the distal end of the dilator and the second distal hole is in the distal end of the insertion sheath.

32. (Withdrawn – Currently Amended) The assembly according to claim 28, wherein ~~the second inlet port comprises a plurality of second inlet ports~~ the first distal hole and the second distal hole are in the insertion sheath.

33. (Withdrawn – Currently Amended) The assembly according to ~~claim 30, wherein the second inlet port comprises a plurality of second inlet ports~~ claim 28, wherein at least one of the combination of the first distal hole and the first proximal hole or the combination of the second distal hole and the second proximal hole is in fluid communication by way of a lumen that passes through the dilator.

34. (Withdrawn – Currently Amended) The assembly according to ~~claim 33, claim 28,~~ wherein ~~at least one of the plurality of first inlet port~~ the first distal hole and the ~~plurality of second inlet ports~~ second distal hole are staggered.

35. (Withdrawn – Currently Amended) The assembly according to claim 28, further comprising:

a penetration gauge; ~~the penetration gauge comprising~~ gauge that includes an indicator, a first access ~~port~~ hole, and a second access ~~port~~ hole;

wherein the first access port hole is in fluid communication with the first drip proximal hole and the second access port hole is in fluid communication with the second drip proximal hole, such that the indicator provides indication of when the first inlet port and the second inlet port penetrate vascular insertion assembly penetrates the vessel.

36. (Withdrawn – Currently Amended) The assembly according to claim 28, ~~further comprising:~~ wherein at least one of the combination of the first distal hole and the first proximal hole or the combination of the second distal hole and the second proximal hole is in fluid communication by way of a lumen that passes through the insertion sheath.

~~a penetration gauge;~~

~~the penetration gauge comprising an indicator, a first fluid sensor, and a second fluid sensor;~~

~~the first fluid sensor adapted to generate a first signal when the first inlet port penetrates the vessel and the second fluid sensor adapted to generate a second signal when the second inlet port penetrates the vessel.~~

37. (Withdrawn – Currently Amended) The assembly according to claim 28, wherein ~~the first inlet port and first drip hole provide initial penetration indication of the vessel~~ the first distal hole and the first proximal hole are in fluid communication by way of a lumen that passes through the dilator and the second distal hole and the second proximal hole are in fluid communication by way of a lumen that passes through the insertion sheath.

38. (Withdrawn – Currently Amended) The assembly according to claim 28, wherein ~~the second inlet port and second drip hole provide too far penetration indication of the vessel~~ the first distal hole and the first proximal hole are in fluid communication by way of a lumen that passes through the insertion sheath and the second distal hole and the second proximal hole are in fluid communication by way of a lumen that passes through the insertion sheath.

39. (Withdrawn – Currently Amended) The assembly according to claim 28, further comprising:

~~at least a third inlet port~~ distal hole located at the distal end of the vascular insertion assembly; and

~~at least a third drip hole, such that at least the third inlet port and at least the third drip hole provide additional penetration information~~ proximal hole located at the proximal end of the vascular insertion assembly, the third proximal hole being in fluid communication with the third distal hole.

40-44. (Cancelled)

45. (Currently Amended) A vascular insertion assembly, comprising:

~~an insertion sheath comprising an inside diameter, a sheath distal end, and a sheath proximate end;~~

~~a dilator sized to fit in the inside diameter of the insertion sheath, the dilator comprising a dilator distal end and a dilator proximate end;~~

~~a first inlet port located about the sheath distal end~~

~~a first indicator coupled with the first inlet port such that when the first inlet port penetrates a vessel the first indicator provides an over insertion indication.~~

a distal end where a first distal hole and a second distal hole are located; and
a proximal end where a first indicator and a second indicator are located;
wherein the first distal hole is in fluid communication with the first indicator and the
second distal hole is in fluid communication with the second indicator; and
wherein the second distal hole is spaced apart from the first distal hole in a proximal
direction.

46. (Currently Amended) A vascular insertion assembly, comprising:

~~an insertion sheath comprising an inside diameter, a sheath distal end, and a sheath proximate end;~~

~~a dilator sized to fit in the inside diameter of the insertion sheath, the dilator comprising a dilator distal end and a dilator proximate end;~~

~~a first inlet port located about the sheath distal end;~~

~~a first indicator coupled with the first inlet port such that when the first inlet port penetrates a vessel the first indicator indicates proper penetration of the insertion sheath to the vessel.~~

a distal end where a first distal hole and a second distal hole are located; and
a proximal end where a first indicator and a second indicator are located;
wherein the first distal hole is in fluid communication with the first indicator and the
second distal hole is in fluid communication with the second indicator; and
wherein the first indicator provides an indication that the vascular insertion assembly is at
one depth in a vessel and the second indicator provides an indication that the vascular insertion
assembly is at another depth in the vessel.

47. (Currently Amended) A vascular insertion assembly, comprising:

~~an insertion sheath comprising an inside diameter, a sheath distal end, and a sheath proximate end~~ having a distal end and a proximate end;

~~a dilator sized to fit in the inside diameter of the insertion sheath, the dilator comprising a dilator distal end and a dilator proximate end~~ sheath, the dilator having a distal end and a proximate end;

a first inlet port located ~~about the dilator~~ at a distal end of the vascular insertion assembly;

a first ~~indicator coupled with the first inlet port such~~ outlet port located at a proximal end of the vascular insertion assembly, the first outlet port being in fluid communication with the first inlet port so that when the first inlet port penetrates a vessel the first ~~indicator~~ outlet port indicates an initial penetration of the ~~insertion sheath to~~ vascular insertion assembly into the vessel;

a second inlet port ~~located about the insertion sheath distal end~~ in the distal end of the insertion sheath;

a second ~~indicator coupled with the second inlet port such~~ outlet port located at the proximal end of the vascular insertion assembly, the second outlet port being in fluid communication with the second inlet port so that when the second inlet port penetrates the vessel the second ~~indicator~~ outlet port indicates over insertion of the ~~insertion sheath to~~ vascular insertion assembly into the vessel.

48. (New) A vascular insertion assembly comprising:

a distal end where a first distal hole and an over insertion hole are located;

wherein the vascular insertion assembly is configured so that the first distal hole provides an indication that the vascular insertion assembly has penetrated a vessel and the over insertion hole provides an indication that the vascular insertion assembly has penetrated too far into the vessel.

49. (New) The assembly according to claim 48 wherein the indication provided by the first distal hole and the over insertion hole is at a proximal end of the vascular insertion assembly.

50. (New) The assembly according to claim 45 comprising an insertion sheath and a dilator sized to fit inside the insertion sheath.

51. (New) The assembly according to claim 45 wherein a third distal hole is located at the distal end of the vascular insertion assembly and a third indicator is located at the proximal end

of the vascular insertion assembly, the third distal hole being in fluid communication with the third indicator.

52. (New) The assembly according to claim 45 wherein the first indicator includes a first proximal hole and the second indicator includes a second proximal hole.

53. (New) The assembly according to claim 46 wherein the second indicator provides an indication that the vascular insertion assembly has been over inserted into the vessel.

54. (New) The assembly according to claim 46 wherein the first indicator includes a first proximal hole and the second indicator includes a second proximal hole.

55. (New) The assembly according to claim 47, wherein the first inlet port s in the distal end of the dilator.

56. (New) The assembly according to claim 47, wherein the first inlet port is in the distal end of the insertion sheath.

57. (New) The assembly according to claim 47, wherein at least one of the combination of the first inlet port and the first outlet port or the combination of the second inlet port and the second outlet port is in fluid communication by way of a lumen that passes through the dilator.

58. (New) The assembly according to claim 47, wherein at least one of the combination of the first inlet port and the first outlet port or the combination of the second inlet port and the second outlet port is in fluid communication by way of a lumen that passes through the insertion sheath.

59. (New) The assembly according to claim 47, wherein the first inlet port and the first outlet port are in fluid communication by way of a lumen that passes through the dilator and the second inlet port and the second outlet port are in fluid communication by way of a lumen that passes through the insertion sheath.

60. (New) The assembly according to claim 47, wherein the first inlet port and the first outlet port are in fluid communication by way of a lumen that passes through the insertion sheath and the second inlet port and the second outlet port are in fluid communication by way of a lumen that passes through the insertion sheath.